



State of Delaware  
Water Infrastructure Advisory Council  
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**Minutes of the 135th Meeting**

**December 7, 2016**

The Water Infrastructure Advisory Council held a public meeting on Wednesday, December 7, 2016 at 9:00 a.m., at Kent County Administrative Complex, 555 S. Bay Road, Conference Room 220, Dover, Delaware.

**MEMBERS PRESENT:**

Jeffrey Bross, Chairman  
Hans Medlarz, Vice-Chair  
Richard Duncan  
Charles Anderson  
Bruce W. Jones  
Eugene Dvornick  
Andy Burger  
Michael Harmer  
Jeffrey Flynn  
Jen Adkins

**MEMBERS ABSENT:**

David Baker  
Lt.Col Douglas D. Riley

**OTHERS PRESENT WERE:**

Terry Deputy, Environmental Finance  
Greg Pope, Environmental Finance  
Laura Rafferty, Environmental Finance  
Davison Mwale, Environmental Finance  
Robert C. Burns, Environmental Finance  
Frank Paquette, Environmental Finance  
Jan Jenkins, Environmental Finance  
Keith Kooker, Environmental Finance  
Reza Moqtaderi, Environmental Finance  
Debbie Rouse, DNREC  
Andrew Bell, DNREC  
Dave Schepens, DNREC  
Jim Sullivan, DNREC  
Keith Mensch, DPH ODW  
Doug Lodge, DHSS/DPH

Heather Warren, DHSS/DPH  
Judy Schwartz, GMB  
Dan String, KCI  
Thomas Wilkes, Cedarville Engineer Group  
Kate Mills, City of Dover  
Jason Loar, DBF  
Tawanda Priester, Tidewater Utilities  
Jeremy Kalmbacher, Tidewater Utilities  
Rodney Wyatt, Artesian  
Ken Branner, Artesian  
Carrie DeSimone, Duffield  
David Athey, AECOM  
Chris Brendza, JMT

Chairman Bross wished everyone a Happy Delaware Day (day the Federal Constitution was ratified in 1787. He also acknowledged that today is the 75<sup>th</sup> anniversary of Pearl Harbor.

**CALL TO ORDER PUBLIC MEETING:**

Meeting came to order at 9:05am.

**APPROVAL OF THE AGENDA:**

Motion made by Mr. Dvornick, seconded by Mr. Duncan to approve the agenda. Motion carried unanimously.

**APPROVAL OF MINUTES –Public Hearing & Public Meeting October 19, 2016:**

Motion made by Mr. Duncan, seconded by Mr. Jones to approve the October 19, 2016 public hearing and public meeting minutes. Motion carried unanimously.

**Chief of Administration-DNREC**

Terry Deputy is now the Chief of Administration for DNREC. He will still manage Environmental Finance and work with the WIAC. His primary role is to consolidate and provide consistency among all the Environmental Finance programs (SRF, Recycling, and Energy). Mr. Deputy will also ensure that financial reviews are completed, and will work on developing a portfolio that will be marketable to Delaware businesses.

Terry Deputy presented the following:

**WIAC-INFORMATIONAL:**

A CWSRF – DWSRF Workshop will be held on Friday, December 16, 2016 from 10:00 am to 12:00 noon at the Kent County Administrative Building, Conference Room 220, 555 S. Bay Road, Dover, DE 19901.

No adverse public comments were received for the draft revised CWSRF FY 2016 PPL and IUP. All documents are final, and loan solicitation letters have been sent.

**NEW BUSINESS:**

Davison Mwale presented the following:

**Delaware  
Water Infrastructure Advisory Council  
Allen Harim, LLC Wastewater Treatment Plant Project:  
Project Scope Change**

- On June 17, 2015, WIAC approved \$11.594 million to Allen Harim, LLC., to finance the construction of expansions, upgrades, water reuse and a new sanitary sewer wastewater treatment unit, at the Harbeson Waste Water Treatment facility in, Harbeson, Sussex County, Delaware.
- The company divided the construction into two phases, Phase I and Phase II.
- **Phase I** construction is complete at \$6,563,360. This phase expanded the WWTP capacity from 1.25 MGD to 2.0 MGD as follows:
  - a) New pump station at the Aeration basins.
  - b) New pumps at the DAFloat basin (raw water & effluent pumps).
  - c) New circulation and aeration systems to CMAS tanks.
  - d) New flow equalization basin (circulation & aeration systems)
  - e) New Clarifier.
  - f) New UV disinfection system.
- **Phase II** which was supposed to construct additional wastewater treatment units, a filtration unit, water reuse plant and a sanitary sewage treatment plant for Allen Harim employees, will not be built:
  - a) Allen Harim, LLC has decided to discontinue treating and discharging wastewater to the Beaverdam Creek.
- Instead, Allen Harim has entered into two agreements with Artesian Wastewater Management Inc. to manage the wastewater from the Harbeson WWTP.
  - a) **First agreement**, sanitary sewer will be transmitted for treatment to the Artesian Beaverdam Creek WWTP in Milton.
  - b) **Second agreement**, treated process wastewater will be transmitted to the Artesian Northern Sussex Water Recycling Facility for spray irrigation disposal.
- In support of the two agreements, on December 1, 2016, Allen Harim submitted a formal change of scope request to the CWSRF.
- Submission followed meetings between DNREC, Allen Harim and Artesian.
- DNREC secretary has approved the scope change.
- EPA has approved the scope change.
- **The Proposed Change in Scope**
- **Sanitary Wastewater:** Allen Harim, LLC will design and build an on-site pump station and force main to connect to a proposed force main for Artesian Wastewater Management Inc., and transmit sanitary sewer flows to Artesian's WWTP in Milton. *Allen Harim, LLC will fund this portion of the proposed project scope.*
- **Treated Process Wastewater:** Allen Harim, LLC will clean up the lagoons where treated process effluent will be diverted. The company will design and build an on-site pumping and a force main to transmit the treated effluent from the lagoons to State Route 5, from where Artesian Wastewater Management Inc. will transmit the flows to their spray irrigation disposal facility. *Allen Harim, LLC will fund this portion of the proposed scope.*

- **Remaining Loan Funds:** Allen Harim, LLC requests to direct \$5million of the remaining loan balance to fund a one-time Impact fee to Artesian Wastewater Management Inc. Impact fee is an eligible cost under the CWSRF program, paid after construction is complete and the system is online.

### **Recommendation**

- Based on the DNREC Secretary and EPA's approval, and subject to the loan conditions approved at the June 17, 2015 WIAC Meeting, Environmental Finance, Office of the Secretary, recommends Council approval and recommendation of the proposed scope change, from the construction of WWTP upgrades, water reuse and sanitary sewer treatment facilities to:
  - a) Construction of pumping stations and force mains to transmit sanitary sewer flows to Artesian WWTP and transmit treated wastewater to Artesian Northern Sussex Water Recycling Facility for disposal through spray irrigation.
  - b) Redirection of \$5million of remaining loan funds to allow Allen Harim, LLC to pay the Impact fee to Artesian Wastewater Management Inc. as part of the capital costs for construction of transmission, storage and disposal facilities.

Motion made by Mr. Dvornick, seconded by Vice-Chair Medlarz to approve the scope change for Allen Harim, LLC. Motion carried unanimously.

Vice-Chair Medlarz stated that this is a great regional solution, and a better solution to the previous plans that were submitted.

Doug Lodge presented the following:

### **DWSRF Loan Requests**

### **Town of Georgetown-Supplemental Funding Request-King Street Water Treatment Plant Upgrade**

#### **Purpose and Need**

This supplemental funding request is due to unanticipated increases in construction costs as identified in the original funding application; significant upgrades are needed at the treatment facility in order for the Town to remain in compliance with drinking water standards.

#### **Environmental Review** Office of Engineering

A categorical exclusion was issued for the original project. This simply supplements the funding to complete project. No additional review was required.

#### **Capacity Development Review**

Based on the review of the technical, managerial, and financial capacities, the Capacity Development Program recommends approval of the loan.

#### **Project Description**

Critical upgrades to the components of the Georgetown King Street water treatment plant

**Public Health Benefits:** Ensure reliable production of potable water, fewer service disruptions, and the promotion of water conservation

**Project Costs/Budget**

Original Loan Amount	\$3,300,000
Supplemental Funding Request	500,000
<b>Total Cost of Project</b>	<b>\$3,800,000</b>

**Construction Dates**

Start Date: May 2016

End Date: March 2017

Jan Jenkins presented the following:

<b><u>King Street Water Treatment Facility Upgrade--Supplemental</u></b>	<b><u>Georgetown</u></b>
Estimated Project Cost & Funding Request	\$500,000
<b><u>Drinking Water Utility</u></b>	
Existing Debt Service	\$560,987
Existing OM&R	\$681,046
Existing Utility Costs	\$1,242,033
Proposed New Debt Service (Proposed Project Costs @ 2% , 20 years)	\$30,456
Proposed New OM&R	\$0
Proposed Utility Costs	\$30,456
Existing and Proposed Utility Costs	\$1,272,489
Number of EDUs	1,727
Residential Share of Utility Costs @ 55%	\$699,869
Existing and Proposed Utility Costs Per Residential EDU	\$405
<b><u>Wastewater Utility</u></b>	
Existing Debt Service	\$914,804
Existing OM&R	\$989,955
Existing Utility Costs	\$1,904,759
Proposed New Debt Service (Proposed Project Costs @ 2% , 30 years)	N/A
Proposed New OM&R	N/A
Proposed Utility Costs	N/A
Existing and Proposed Utility Costs	\$1,904,759
Number of EDUs	1,831
Residential Share of Utility Costs @ 49%	\$933,332
Existing and Proposed Utility Costs Per Residential EDU	\$510
<b><u>Affordability Analysis</u></b>	
Median Household Income (MHI)	\$47,525
% of MHI Drinking Water Utility Costs	0.85%
% of MHI Wastewater Utility Costs	1.07%
% of MHI Combined Utility Costs	1.93%

**Loan Terms**

It should be noted that this financing does meet the current affordability guidelines. However, the terms of this financing will be the same as the original loan which are as follows:

- The Loan is to be secured by a General Obligation Bond
- The interest rate for the loan will be 0%

Upon successful completion of the project, the loan principal will be 100% forgiven.

In addition, it is a requirement of the Drinking Water 2017 Grant that 20% of the grant amount be used for principal forgiveness. This principal forgiveness will help satisfy that requirement.

**Recommendation**

Based on information presented in the Town of Georgetown's DWSRF application and the financial review conducted by DNREC, Environmental Finance; the DHSS, Division of Public Health recommends

Council's approval of a DWSRF Binding Loan Commitment in the amount of \$500,000 with the terms presented today.

Motion made by Mr. Duncan, seconded by Vice-Chair Medlarz to approve the DWSRF Binding Commitment (\$500,000) for the Town of Georgetown. Mr. Dvornick abstained from voting. Motion carried.

Vice-Chair Medlarz stated that based on the MHI change it is prudent to support the loan forgiveness, and the general terms.

Doug Lodge presented the following:

### **Town of Selbyville-Supplemental Funding Request-Water Treatment Plant Upgrade**

#### **Purpose and Need**

This supplemental funding request is due to unanticipated increases in construction costs as identified in the original funding application. Significant upgrades are needed at the treatment facility in order for the Town to remain in compliance with drinking water standards.

#### **Environmental Review** Office of Engineering

A categorical exclusion was issued for the original project. This simply supplements the funding to complete the project. No additional review was required.

#### **Capacity Development Review**

Based on the review of the technical, managerial, and financial capacities the Capacity Development Program recommends approval of the loan.

#### **Project Description**

Critical upgrades to the components of the water treatment plant in order to deal with PCE contamination

**Public Health Benefits:** Ensure reliable production of potable water

#### **Project Costs/Budget**

Original Loan Amount	\$2,750,300
Supplemental Funding Request	500,000
<b>Total Cost of Project</b>	<b>\$3,250,300</b>

#### **Construction Dates**

Start Date: May 2016  
End Date: April 2017

Jan Jenkins presented the following:

<b><u>Water Treatment Plan Upgrade</u></b>	<b><u>Selbyville</u></b>
<b><u>Supplemental</u></b>	
Estimated Project Cost & Funding Request	\$500,000
<b><u>Drinking Water Utility</u></b>	
Existing Debt Service	\$160,171
Existing OM&R	\$493,820
Existing Utility Costs	\$653,991
Proposed New Debt Service (Proposed Project Costs @ 2%, 20 years)	\$30,456
Proposed New OM&R	\$26,000
Proposed Utility Costs	\$56,456
Existing and Proposed Utility Costs	\$710,447
Number of EDUs	1,204
Residential Share of Utility Costs @ 90%	\$639,402
Existing and Proposed Utility Costs Per Residential EDU	\$531
<b><u>Waste water Utility</u></b>	
Existing Debt Service	\$303,985
Existing OM&R	\$1,234,162
Existing Utility Costs	\$1,538,147
Proposed New Debt Service (Proposed Project Costs @ 2%, 30 years)	N/A
Proposed New OM&R	N/A
Proposed Utility Costs	N/A
Existing and Proposed Utility Costs	\$1,538,147
Number of EDUs	1,204
Residential Share of Utility Costs @ 25%	\$384,537
Existing and Proposed Utility Costs Per Residential EDU	\$319
<b><u>Affordability Analysis</u></b>	
Median Household Income (MHI)	\$40,195
% of MHI Drinking Water Utility Costs	1.32%
% of MHI Wastewater Utility Costs	0.79%
% of MHI Combined Utility Costs	2.12%

### **Loan Terms**

The terms of this financing will be the same as the original loan which are as follows:

The Loan is to be secured by a General Obligation Bond

The interest rate for the loan will be 0%

Upon successful completion of the project, the loan principal will be 100% forgiven.

### **Recommendation**

Based on information presented in the Town of Selbyville's application and the financial review conducted by DNREC, Environmental Finance; the DHSS, Division of Public Health recommends Council's approval of a DWSRF Binding Loan Commitment in the amount of \$500,000 with the terms presented today.

Motion made by Anderson, seconded by Mr. Dvornick to approve the DWSRF Binding Commitment (\$500,000) for the Town of Selbyville. Mr. Duncan abstained from voting. Motion carried.

Doug Lodge presented the following;

### **Town of Laurel-Well Replacement-Tabled until February 15, 2017 WIAC Meeting**

#### **Purpose and Need**

The well replacement project will involve a new production well replacing the current well. The present well is experiencing operational concerns and higher than usual iron levels.

**Environmental Review** Office of Engineering

Review of the Environmental Information Document and the environmental checklist, found that there would be no adverse impact due to this project. After the required public notice, a Categorical Exclusion has been issued per the State Environmental Review Procedures.

**Capacity Development Review**

Based on the review of the technical, managerial, and financial capacities, the Capacity Development Program recommends approval of the loan.

**Project Description**

- Replace a well that is having operational difficulties and levels of iron that are closed to exceeding secondary water standards.

**Public Health Benefits**

- Provide a new and sustainable water source.
- Meet ten state standards by providing 2 duty wells and one backup

**Project Costs/Budget**

Non-Construction	\$	156,374
Construction:		
Well		300,000
Contingencies		125,099
<b>Total Cost of Project</b>	<b>\$</b>	<b>781,869</b>

**Construction Dates**

Start Date: February 2018

End Date: November 2018

There were concerns about the non-construction costs and if the \$156,374 included a test well drilling program to know where an active target exists. Mr Lodge stated that engineering, design and inspection have been completed and they know the site well's installation. Vice-Chair Medlarz asked if those costs were a part of the \$156,374 and Mr. Lodge stated that they were not. It was determined that the soft costs were over 50% of the construction budget. Mr. Lodge stated that it was the budget that was presented to him, and was not aware of any ancillary construction.



Jan Jenkins presented the following:

<b><u>Town of Laurel</u></b>	<b>Well #7 and Treatment</b>	<b>100% Principal Forgiveness</b>
Estimated Project Cost & Funding Request	\$770,000	\$0
<b><u>Drinking Water Utility</u></b>		
Existing Debt Service*	\$176,902	\$176,902
Existing OM&R	\$340,606	\$340,606
Existing Utility Costs	\$517,508	\$517,508
Proposed New Debt Service (Proposed Project Costs @ 2% , 30 years)	\$29,773	\$0
Proposed New OM&R	\$16,526	\$16,526
Proposed Utility Costs	\$46,299	\$16,526
Existing and Proposed Utility Costs	\$563,807	\$534,034
Number of EDUs	1,483	1,483
Residential Share of Utility Costs @ 85%	\$479,236	\$453,929
Existing and Proposed Utility Costs Per Residential EDU	\$323	\$306
<b><u>Wastewater Utility</u></b>		
Existing Debt Service	\$458,644	\$458,644
Existing OM&R	\$698,986	\$698,986
Existing Utility Costs	\$1,157,630	\$1,157,630
Proposed New Debt Service (Proposed Project Costs @ 2% , 30 years)	N/A	N/A
Proposed New OM&R	N/A	N/A
Proposed Utility Costs	N/A	N/A
Existing and Proposed Utility Costs	\$1,157,630	\$1,157,630
Number of EDUs	1,483	1,483
Residential Share of Utility Costs @ 85%	\$983,986	\$983,986
Existing and Proposed Utility Costs Per Residential EDU	\$664	\$664
<b><u>Affordability Analysis</u></b>		
Median Household Income (MHI)	\$33,387	\$33,387
% of MHI Drinking Water Utility Costs	<b>0.97%</b>	<b>0.92%</b>
% of MHI Wastewater Utility Costs	<b>1.99%</b>	<b>1.99%</b>
% of MHI Combined Utility Costs	<b>2.96%</b>	<b>2.90%</b>

### **Terms**

- The interest rate will be 2.0% during the construction period. The interest will be payable during the construction period in semi-annual installments.
- There will be 100% principal forgiveness upon completion of the project.

### **Recommendation**

Based on information presented in the Town of Laurel's Drinking Water SRF application, financial review conducted by DNREC, the Department of Health and Social Services, Division of Public Health recommends Council's approval of a DWSRF Binding Loan Commitment in the amount of \$770,000 to the Town of Laurel for the Well #7 project. The Town will be required to pay 2% interest during project construction. At the successful completion of the project, 100% of the loan principal shall be forgiven.

Motion made by Vice-Chair Medlarz, seconded by Mr. Duncan to approve the DWSRF Binding Loan Commitment (\$700,000) for the Town of Laurel.

Vice-Chair Medlarz recommended that the engineer contract should be structured to allow the recovery of previously incurred costs. It should be a requirement that there is no lump sum contract.

Chairman Bross recommends the request for the Town of Laurel to be tabled until the February 15, 2017 meeting until staff provides WIAC with an explanation on the soft costs: Mr. Jones agreed with this. Vice-Chair Medlarz and Mr. Duncan withdrew their motions to approve the DWSRF Binding Loan Commitment (\$700,000) for the Town of Laurel.

Motion made by Vice-Chair Medlarz, seconded by Mr. Duncan to table the request for the DWSRF Binding Loan Commitment (\$700,000) for the Town of Laurel until the February 15, 2017 meeting. Motion carried unanimously.

Doug Lodge presented the following:

**Town of Delmar-Grove Street Water Main Improvements- Tabled until February 15, 2017 WIAC Meeting**

**Purpose and Need**

The project will install a new water system in the Grove Street area located in the Town of Delmar. The current distribution system will be properly abandoned and fire hydrant system will be installed.

**Environmental Review** Office of Engineering

Review of the Environmental Information Document and the environmental checklist, found that there would be no adverse impact due to this project. A Categorical Exclusion has been issued per the State Environmental Review Procedures.

**Capacity Development Review**

Based on the review of the technical, managerial, and financial capacities, the Capacity Development Program recommends approval of the loan.

**Project Description**

- The project will entail installing approximately 2000 linear feet of 8 inch water main, valves and fire hydrants along Grove Street in Delmar

**Public Health Benefits**

- Reduced potential for system contamination
- Provide reliable water service
- Provide fire suppression

**Project Costs/Budget**

Non-Construction	\$169,679.80
<b><u>Construction:</u></b>	
Main and Apertures	\$694,260.00
Contingencies	\$ 69,426.00
<b>Total Cost of Project</b>	<b>\$933,365.80</b>

**Construction Dates**

Start Date: July 2017

End Date: November 2017

Jan Jenkins presented the following:

<b><u>Water Main Upgrades</u></b>		<b><u>\$662,400.00</u></b>	
		<b><u>Delmar</u></b>	<b><u>Principal Forgiveness</u></b>
Estimated Project Cost & Funding Request		\$933,366	\$270,966
<b><u>Drinking Water Utility</u></b>			
Existing Debt Service*		\$75,976	\$75,976
Existing OM&R		\$478,001	\$478,001
Existing Utility Costs		\$553,977	\$553,977
Proposed New Debt Service (Proposed Project Costs @ 2%, 30 years)		\$56,853	\$12,055
Proposed New OM&R		\$0	\$0
Proposed Utility Costs		\$56,853	\$12,055
Existing and Proposed Utility Costs		\$610,830	\$566,032
Number of Residential EDUs		612	612
Residential Share of Utility Costs at 96%		\$586,397	\$543,391
Existing and Proposed Utility Costs Per Residential EDU		\$958	\$888
<b><u>Wastewater Utility</u></b>			
Existing Debt Service		\$75,364	\$75,364
Existing OM&R		\$811,270	\$811,270
Existing Utility Costs		\$886,634	\$886,634
Proposed New Debt Service (Proposed Project Costs @ 2%, 30 years)		N/A	N/A
Proposed New OM&R		N/A	N/A
Proposed Utility Costs		N/A	N/A
Existing and Proposed Utility Costs		\$886,634	\$886,634
Number of EDUs		602	602
Residential Share of Utility Costs @ per NOI		\$851,169	\$851,169
Existing and Proposed Utility Costs Per Residential EDU		\$1,414	\$1,414
<b><u>Affordability Analysis</u></b>			
Median Household Income (MHI)		\$35,938	\$35,938
% of MHI Drinking Water Utility Costs		2.67%	2.47%
% of MHI Wastewater Utility Costs		3.93%	3.93%
% of MHI Combined Utility Costs		6.60%	6.40%

### **Loan Terms**

- The Loan is to be secured by a General Obligation Bond
- The interest rate for the loan will be 2% annually.
- During construction, the loan will require semi-annual interest only payments
- Upon completion of the project, the principal of \$662,400 will be forgiven and the remaining balance will be amortized over not more than 30 years with semi-annual principal and interest payments.

### **Recommendation**

Based on information presented in the Town of Delmar's Drinking Water SRF application, and the financial review conducted by DNREC, Environmental Finance; the Department of Health and Social Services, Division of Public Health recommends Council's approval of a DWSRF Binding Commitment in the amount of \$270,966 to the Town of Delmar for the improvements to the water mains.

The loan will have a 2% interest rate. Payments will be semi-annual. At the successful completion of the project, \$662,400 of the principle will be forgiven with the remainder being amortized over not more than 30 years.

Motion made by Mr. Dvornick, seconded by Mr. Duncan to approve the DWSRF Binding Loan Commitment (\$270,966) for the Town of Delmar. There were concerns about the soft non- construction costs. Mr. Dvornick and Mr. Duncan withdrew their motions.

Motion made by Mr. Dvornick, seconded by Mr. Burger to table the request for the DWSRF Binding Loan Commitment (\$270,966) for the Town of Delmar until the February 15, 2017 meeting. Motion carried unanimously.

Davison Mwale presented the following:

### **CWSRF Loan Request**

#### **City of Dover-Tar Ditch Interceptor**

##### **Project Description**

The City of Dover is requesting \$250,000 from the Delaware Water Pollution Control Revolving Fund to finance the replacement of 300 LF of a fifteen inch sewer pipe along the Tar Ditch interceptor, located east of South State Street and south of Elm Terrace in Dover.

##### **Environmental Review**

Technical reviews of the loan applications PER and EID revealed no environmental impacts anticipated from the proposed project. The project qualified for a Categorical Exclusion which was published 11/6/16-12/6/16

##### **Project Schedule**

Start of construction	July 2017
Completion of construction	May 2018

##### **Project Budget**

a. Administration	<b><u>\$0</u></b>
b. Engineering	<b><u>\$0</u></b>
c. Construction	<b><u>\$250,000</u></b>
ii. Construction and Installation	\$250,000
e. Contingencies	<b><u>\$0</u></b>
<b>Total</b>	<b><u>\$250,000</u></b>

##### **Source of Funds**

<b>Proposed WPCRF Loan</b>	<b>\$250,000</b>
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City Of Dover	
Affordability Analysis	
Estimated Project Cost	\$250,000
Loan Amount	\$250,000
Interest Rate	2.00%
Loan Terms Years	20
Annual Debt Service, New Facility	\$15,228
Existing Debt Service	\$611,300

Increase in O,M & R	\$670
O,M & R Cost, Existing Facility	\$8,220,600
Total Cost New Facility	<u>\$8,847,798</u>
Residential Share at 83.%	<u>\$7,343,672</u>
EDU's	12,365
<b><u>Wastewater</u></b>	
Estimated Annual Charge Per EDU	<u>\$594</u>
Median Household Income	\$45,660
% of MHI	<u>1.30%</u>
<b><u>Drinking Water</u></b>	
Estimated Annual Charge Per EDU	\$274
% of MHI	<u>0.60%</u>
<b>Combined % MHI Drinking and Wastewater</b>	<u>1.90%</u>

**Affordability Analysis**

- The new project results in a user rate estimated at \$594 per EDU for wastewater which is 1.30% of MHI.
- Due to the low annual expense for this project and the high number of EDU's associated with it, the potential effect on individual user rates is minimal.
- The increase is estimated at just \$1.29 annually per EDU. The City does not anticipate any rate increase as a result of this project.
- When a utility provides both wastewater and drinking water services, the overall cost per EDU should not exceed 2% of MHI in order to be deemed affordable. The proposed project has a combined user rate of 1.90% for both wastewater and drinking water. Thus the project is considered affordable.

**Proposed Loans Terms**

- The proposed loan will be secured by a Revenue Pledge.
- 2% interest, 20 year term
- During construction semi-annual installments of 2% interest only payments will be made by the City. Upon project completion, principal and interest payments shall be paid semi-annually in an amount sufficient to amortize the outstanding principal balance over the 20-year term.

**Recommendation**

Environmental Finance, Office of the Secretary, recommends Council approval and recommendation of a CWSRF Binding Loan Commitment in the amount of \$250,000 to the City of Dover for the proposed project. The City will be required to pay 2% interest during project construction paid semi-annually. Upon completion, principal and interest payments shall be paid semi-annually in an amount sufficient to amortize the outstanding principal balance over the 20-year term.

Mr. Deputy stated that the City of Dover is the only borrower that provides a revenue pledge. All other borrowers provide General Obligation Pledges.

Motion made by Mr. Anderson, seconded by Vice-Chair Medlarz to approve the CWSRF Binding Loan Commitment (\$250,000) for the City of Dover. Motion carried unanimously.

Greg Pope presented the following:

### **Wastewater Asset Management Plan Development Incentive Requests**

**Applications received by August 31, 2016:**

- Received five applications for Wastewater Asset Management
- The Scope of Work in all of the applications were reviewed by DNREC staff and met or exceeded the minimum standards set by the WIAC:
- 1. **Current State of Assets** - What is the current state of my assets?
- 2. **Level of Service** - What is my required "sustainable" level of service?
- 3. **Critical Assets** - Which assets are critical to sustained performance?
- 4. **Minimum Life Cycle Cost** - What are my minimum life-cycle costs?
- 5. **Long Term Funding Plan** - What is my best long-term funding strategy?
- Submittal of an asset management plan is required annually during the five year agreement period. If the initial plan cannot be completed by end of year one, a status report must be submitted and initial plan must be completed no later than two years from approval of the grant agreement.

Asset Management Incentive Program Applicant #5:	Town of Georgetown
Name:	Wastewater Asset Management Plan
Total Project Cost:	\$100,000
Assistance Requested:	<b>\$100,000</b>
Start Date:	12/15/2016
Completion Date:	12/31/2021
Consultant:	KCI Technologies
Deliverables:	- Asset Database, condition assessment, critical asset ID - Asset Management Report - Recommendations/Implementation

Motion made by Mr. Duncan, seconded by Vice-Chair Medlarz to approve the Town of Georgetown's Wastewater Asset Management Plan (\$100,000). Mr. Dvornick was not present at the time of voting. Motion carried.

Asset Management Incentive Program Applicant #1:	City of Seaford
Name:	Wastewater Asset Management Plan
Total Project Cost:	\$119,500
Assistance Requested:	<b>\$100,000</b>
Start Date:	10/10/2016
End Date:	10/10/2021
Consultant:	George, Miles, & Buhr
Deliverables:	- Asset Database, condition assessment, critical asset ID

	<ul style="list-style-type: none"> <li>- Asset Management Report</li> <li>- Recommendations/Implementation</li> </ul>
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Motion made by Mr. Duncan, seconded by Mr. Harmer to approve the City of Seaford's Wastewater Asset Management Plan (\$100,000). Mr. Dvornick was not present at the time of voting. Mr. Anderson abstained. Motion carried.

Asset Management Incentive Program Applicant #3:	Town of Selbyville
Name:	Wastewater Asset Management Plan
Total Project Cost:	\$100,000
Assistance Requested:	<b>\$100,000</b>
Start Date:	12/15/2016
Completion Date:	12/31/2021
Consultant:	KCI Technologies
Deliverables:	<ul style="list-style-type: none"> <li>- Asset Database, condition assessment, critical asset ID</li> <li>- Asset Management Report</li> <li>- Recommendations/Implementation</li> </ul>

Motion made by Vice-Chair Medlarz, seconded by Ms. Adkins to approve the Town of Selbyville's Wastewater Asset Management Plan (\$100,000). Mr. Duncan abstained. Motion carried.

WIAC would like the Wastewater Asset Management Plan Development Incentive Program guidelines to be reviewed before refunding it.

<b>Summary of Requested Wastewater Asset Management Grants</b>	
<b><u>Applicant</u></b>	<b><u>Amount Requested</u></b>
Town of Georgetown	\$100,000
City of Seaford	\$100,000
Town of Selbyville	\$100,000
<b>Total amount Requested:</b>	<b>\$300,000</b>
<b>Amount allocated:</b>	<b>\$500,000</b>
<b>Remaining Unallocated Balance</b>	<b>\$0</b>
<b>Recommendation: Environmental Finance recommends approval of all 3 Wastewater Asset Management applications; and request an additional allocation of \$200,000.</b>	

Heather Warren presented the following:

**Drinking Water Asset Management Plan Development Incentive Requests**

**Town of Georgetown-Tabled until February 15, 2017 WIAC Meeting**

- \$ 100,000
- Consultant: KCI Technologies
- Start Date: 12/15/16
- End Date: 12/31/2021
- Deliverables:
  - Asset Database, condition assessment, critical asset ID
  - Asset Management Report
  - Recommendations/Implementation

Motion made by Mr. Duncan, seconded by Mr. Jones to approve the DW Asset Management Plan Development Incentive Request (\$100,000) for the Town of Georgetown. Mr Dvornick abstained. Motion carried.

**City of Seaford-Tabled until February 15, 2017 WIAC Meeting**

- \$ 97,200
- Consultant: George, Miles, and Buhr
- Start Date: 12/15/16
- End Date: 12/31/2021
- Deliverables:
  - Asset Database, condition assessment, critical asset ID
  - Asset Management Report
  - Recommendations/Implementation

Motion made by Mr. Duncan, seconded by Mr. Dvornick to approve the DW Asset Management Plan Development Incentive Request (\$97,200) for the City of Seaford. Mr. Anderson abstained. Motion carried.

**Town of Selbyville- Tabled until February 15, 2017 WIAC Meeting**

- \$ 100,000
- Consultant: KCI Technologies
- Start Date: 12/15/16
- End Date: 12/31/2021
- Deliverables:
  - Asset Database, condition assessment, critical asset ID
  - Asset Management Report
  - Recommendations/Implementation

Motion made by Mr. Anderson, seconded by Mr. Dvornick to approve the DW Asset Management Plan Development Incentive Request (\$100,000) for the Town of Selbyville. Mr. Duncan abstained. Motion carried.

**Summary**

- 4 previously applications totaling \$400,000
- 3 application current request totaling \$297,200
- \$500,000 Current Year Allocation
- \$197,200 Additional Allocation Requested

Agenda should have been amended to show the reallocation of public funds (\$197,200) as it is a public



meeting and it is a transparency issue. The DW Asset Management Plan Development Incentive Requests for Town of Georgetown, City of Seaford, and the Town of Selbyville have been tabled until February 15, 2017.

WIAC requested that Drinking Water not disburse money beyond what their budget allows in the non-federal admin account. Drinking Water must come before WIAC in February 15, 2017 to request the reallocation of funds, or supplementing that type of funding.

**DWSRF Non Federal Administrative Account (NFAA) – Current and Proposed Program Uses**

	<b>FY13 Actual</b>	<b>FY14 Actual</b>	<b>FY15 Actual</b>	<b>FY16 Projected</b>	<b>FY17 Projected</b>
<u>Revenue Sources</u>					
1. Investment Interest	\$25,258	\$30,475	\$31,084	\$31,706	\$32,340
2. Administrative Fee	\$1,437,416	\$1,949,775	\$1,456,581	\$1,591,324	\$1,691,217
3. Origination Fee	\$26,000	\$36,943	\$45,375	\$0	\$0
<b>Total Annual Revenues</b>	<b>\$1,488,674</b>	<b>\$2,017,193</b>	<b>\$1,533,040</b>	<b>\$1,623,030</b>	<b>\$1,723,557</b>
4. Federal Set- Aside Allowance Shortfall	\$0	(\$87,942)	(\$114,272)	(\$148,105)	(\$203,052)
<u>Net Revenue</u>	<u>\$1,488,674</u>	<u>\$1,929,251</u>	<u>\$1,418,768</u>	<u>\$1,474,925</u>	<u>\$1,520,506</u>
5. Committed - DWSRF State Match	\$0	\$69,000	\$0	<b>\$1,662,400</b>	\$0
<u>Proposed Program Uses</u>					
Reserve - Loan and Grant Programs					
DWSRF Innovation and Technology Grants				\$150,000	\$150,000
Proposed Additional Subsidization Program \$2,653,500				\$1,326,750	\$1,326,750
DWSRF Asset Management Grant			\$250,000	<b>\$697,200</b>	\$500,000
Project Planning Advances				\$300,000	\$300,000
DWSRF Matching Planning Grants		\$13,066	\$220,256	\$300,000	\$200,000
<b>Total Proposed Program Uses</b>	<b>\$0</b>	<b>\$13,066</b>	<b>\$470,256</b>	<b>\$2,773,950</b>	<b>\$2,476,750</b>
<u>Annual Fund Balance</u>	<u>\$1,488,674</u>	<u>\$1,935,127</u>	<u>\$1,062,784</u>	<u>(\$2,813,320)</u>	<u>(\$753,193)</u>
Beginning Yr. Fund Balance	\$6,507,221	\$7,995,895	\$9,931,022	\$10,993,807	\$8,180,487
End of Year Fund Balance	\$7,995,895	\$9,931,022	\$10,993,807	\$8,180,487	\$7,427,294
<b>FAB Administrative Two Year Reserve</b>					4,959,987

Jim Sullivan presented the following:

**Community Water Quality Grant Requests**

The Community Water Quality Improvement Grant (CWQIG) is an annually determined set aside in the Delaware Clean Water State Revolving Fund (CWSRF) Non-Federal Administrative Account.

The program is designed to assist non-profit organizations, conservation districts, community organizations, and/or homeowners associations with implementing projects or programs within Delaware's developed landscape to improve water quality in designated impaired watersheds consistent with specific plans developed for watershed improvements.

A grant workshop was held on September 13, 2016 with grant proposals due on October 26<sup>th</sup>. A review and ranking of the proposals was held on November 21, 2016.

The review committee consists of:

Jennifer Adkins WIAC Member  
 Charles Anderson WIAC Member  
 Sara Esposito Department of Transportation  
 Brittany Sturgis Division of Watershed Stewardship  
 Jim Sullivan Division of Watershed Stewardship  
 Jennifer Walls Division of Watershed Stewardship  
 Sharon Webb Division of Watershed Stewardship  
 Jennifer Volk University of Delaware Cooperative Extension

There were a total of 4 proposals submitted.

Available funds = \$350,000

Funding request from proposals = \$267,696

Recommend 1 Grant award for innovative research project (IR) = \$67,696

Request a 2<sup>nd</sup> solicitation in March 2017 for the remaining \$282,304 and recommend projects for funding at the April WIAC meeting.

**Fiscal Year 2017  
 Community Water Quality Improvement Grant  
 Proposals Recommended for Funding**

<b>Applicant</b>	<b>Proposal Objectives</b>	<b>Proposal Score</b>	<b>Total Project Cost</b>	<b>Funding request amount</b>
<b>Partnership For The Delaware Estuary</b>	<b>Juvenile Freshwater Mussel Rearing for Water Quality Improvement in Delaware Collection, propagation, rearing, tagging, reintroduction, and monitoring of freshwater mussels into restoration streams.</b>	<b>83.875</b>	<b>\$84,619</b>	<b>\$67,696</b>
		<b>Total</b>	<b>\$84,619</b>	<b>\$67,696</b>

Percent of Allocation (\$350K)

19%

Motion made by Mr. Dvornick, seconded by Mr. Burger, to approve the Community Water Quality Improvement Grant Request (\$67,696) for the Partnership for The Delaware Estuary. Ms. Adkins abstained. Motion carried.

Jim Sullivan presented the following:

**Surface Water Matching Planning Grants  
 Award Recommendations (November 2016 submittal)**

- A press release was issued on October 12, 2016.
- Grant proposals were due on November 16, 2016.
- A review and ranking of the grant proposals was held on November 23, 2016.
- After a detailed review and ranking 1 grant application was considered eligible and acceptable.
- The following grant recommendation is offered to the Water Infrastructure Advisory Council for approval.

**Town of Clayton Storm Water Inventory and Green Infrastructure Retrofit Analysis-Final  
Ranking 1 Final Score: 87.75**

This first phase includes an inventory and mapping of storm water infrastructure within in the Town’s jurisdiction, meeting with potential co-permittees and DNREC to begin “Interjurisdictional Agreement” discussions and evaluation of potential green storm water retrofits.

This storm water infrastructure will be added to the existing drinking water and sewer infrastructure map using ArcGIS software. It is anticipated that 2 potential green storm water infrastructure projects will be identified.

Project Cost: \$49,900	Recommended Grant Award: \$24, 950
Totals: \$49,900	\$24,950
Percent of Allocation from Previous Requests:	28%
Percent of Allocation this Request:	8%
Percent of Allocation Remaining (\$300K):	64%

Motion made by Vice-Chair Medlarz, seconded by Mr. Burger to approve the Surface Water Matching Planning Grant Request (\$24,950) for the Town of Clayton. Motion carried unanimously.

Terry Deputy presented the following:

**Proposed Extension-CWSRF and DWSRF Interim Interest Rate Policy**

Interim Interest Rate Criteria (for new loan applications, shall Sunset on December 31, 2017):

- 2.0% Interest Rate for Public, Private, and Investor-Owned CWSRF and DWSRF loans, except as noted below
- Interest Rates lower than 2.0% may be provided based on proposed project affordability (proposed project user rates above 1.5% of MHI, and 2.0% of MHI for drinking water and wastewater combined)
- 30 Year Repayment Loan Terms may be provided to help make projects affordable, subject to useful life of improvement

CWSRF Land Conservation, and Water Quality Improvement Sponsorship Programs:

- 2.0% Interest Rate shall be the lowest rate provided
- 90% of the Municipal Bond Yield (MBY) for the 20 year Tax Exempt AA Rated Issues will be used to establish Initial Interest Rate for Municipal and Private loans;
- 90% of the Corporate Bond Yield (CBY) for a 10+ year High Quality Rated Issues will be to establish Initial Interest Rate for Investor-Owned loans
- MBY and CBY Interest Rates can be located at:  
[http://finance.yahoo.com/bonds/composite\\_bond\\_rates](http://finance.yahoo.com/bonds/composite_bond_rates)

DWSRF Loans and Public Health Concerns:

- The Loan Origination Fee is waived, and not required
- To address immediate Public Health Quality and Quantity Infrastructure Deficiencies (at least 50.0% a proposed project must address Acute and Non-Acute Deficiencies) borrowers may receive 1.0% loans, principal loan forgiveness, and extended loan terms up to 30 years

It was clarified that principal loan forgiveness, interest rate subsidies for project affordability are not available with the CWSRF Land Conservation and Water Quality Improvement Sponsorship Programs; this has been set up to prevent double dipping.

Motion made by Mr. Anderson, seconded by Mr. Dvornick to approve the extension to the CWSRF and DWSRF Interim Interest Rate Policy. Motion carried unanimously.

Greg Pope presented the following:

### ADMINISTRATORS' REPORTS

#### **Project Updates**

Seaford – Solar Array Project -  
Construction – 80% complete

Smyrna – North Duck Creek Pump Station and Sewer Facilities Extension  
Final Phase – Construction 85% complete

Kent County –WWTP Nutrient Removal & Capacity Expansion  
The project is complete. Ribbon cutting ceremony was held November 18, 2016

Division of Parks and Recreation – Lums Pond Improvements Phase II  
Construction – 84% complete

Sussex County-Angola North  
Pre-Bid meeting to be held December 14, 2016

Frank Paquette presented the following:

### **CWSRF and DWSRF Cash Flow**

#### **Delaware CWSRF and DWSRF Financial Report**

Month Ending - November 25, 2016

	Sources of Funds	CWSRF (Millions of \$) Obligation of Funds	Disbursement of Funds	Sources of Funds	DWSRF (Millions of \$) Obligation of Funds	Disbursement of Funds
<b>Actuals Through November 25, 2016</b>						
Source of Funds						
Cap. Grants + State Match - Administrative	\$235.373			\$182.046		
Transfer of DWSRF Funds + State Match	31.137			(31.529)		
SRF Loan Repayments	140.890			46.811		
NPS Loan Repayments	14.517					
Investment Interest	11.614			2.735		
	<u>433.531</u>			<u>200.063</u>		
Loan Dollars:						
Cap. Grant Loans		\$326.313	\$301.318		\$172.267	\$156.698
Non Cap. Grant Loans		16.111	16.111		5.000	5.000
		<u>\$342.424</u>	<u>\$317.429</u>		<u>\$177.267</u>	<u>\$161.698</u>
Balance Available for Loans		\$91.107	\$116.102		\$22.796	\$38.365
<b>Projected November 26, 2016 through June 30, 2017</b>						
Source of Funds						
FY 2016 Capitalization Grant + State Match - Admin	\$0.000			\$0.000		
Transfer from CWSRF to DWSRF	As Needed			As Needed		
SRF Loan Repayments	5.969			0.703		
Investment Interest	0.580			0.377		
	<u>\$6.549</u>			<u>\$1.080</u>		
Loan Dollars						
Cap. Grant & Non Cap Grant Loans		\$115.000	\$47.868		\$20.000	\$3.302
NPS Loans		0.470	0.470			
		<u>\$115.470</u>	<u>\$48.338</u>		<u>\$20.000</u>	<u>\$3.302</u>
FY16 Balance Available for Loans		(\$108.921)	(\$41.789)		(\$18.920)	(\$2.222)
<b>Cumulative Balance Available for Loans</b>		<b>(\$17.815)</b>	<b>\$74.313</b>		<b>\$3.876</b>	<b>\$36.143</b>

There was concern about the encumbered funds that are not being utilized. It was suggested that the WIAC take a look at the lifetime of an application of more than 12 months. Sometimes an applicant has to wait on a referendum, and this can delay projects.

**SUBCOMMITTEE REPORTS:**

**Wastewater:** Met on November 29. Mr. Jones reported that they agreed to review and make recommendations to WIAC for approval of grants and loans, and to make sure a high-level review is conducted. There will be an update to the Statewide Wastewater Needs Analysis that identified some major and minor wastewater systems and their capital improvement projects over a 5 year period (2011-2016) along with the project funding requirements; the update will include any additions to new and existing systems; true improvements that will be made and what those costs will be; develop a scope of work that will be associated with the Statewide Wastewater Needs Assessment, which would address underserved communities and to provide a recommendation for funding. There will be a wastewater and existing sewer service map at the next Wastewater Subcommittee meeting that has been developed with the assistance of County and State Representatives that will display underserved communities; this should be presented at the next WIAC meeting on February 15, 2017.

A 5 year CIP is a tentative number. There are audited records. It was suggested that the subcommittee could take information from the outlook, current budget, and history to use a calculated number to be used as a trajectory.

**Surface Water Management:** Met on December 1, 2016. Vice-Chair Medlarz stated that the following were discussed: Partnership for the Delaware Estuary, the MS4 tie in for the Town of Clayton, and 3 granted extension requests. Mike Powell (DNREC) has been asked to put together an Ad Hoc Committee with people that have knowledge with: Flood Plain Modeling, Flood Plain identification, land use application of Flood Plains, and documentation of Flood Plain mapping. Mr. Powell would like WIAC representation on the Ad Hoc Committee, but it does not have to be a WIAC member; it could be a WIAC subcommittee member: someone will be picked at the February 15, 2017 WIAC meeting.

**Finance:** Met on December 5, 2016. Mr. Burger complemented the staff that he works with on the subcommittee and thanked Eugene Dvornick for calling in to the meeting.

**Drinking Water:** Mr. Duncan stated that they communicated electronically. Richard Duncan and Heather Warren visited a facility that was loan-strapped and was asking for loan forgiveness. Mr. Duncan was disheartened to see the amount of money that the State has obligated to this water system and it is still not up and running. Hopefully, the State can help; however, he hopes to avoid this situation in the future.

Chairman Bross stated that it is possible the Clean Water Fee effort may be rejuvenated in the future.

**PUBLIC COMMENTS:** None

**GOOD OF THE COUNCIL:** Jeff Flynn acknowledged all of the Board Members for their work.

**MEETING ADJOURNMENT:** Chairman Bross adjourned the meeting at 11:10am. Next WIAC meeting is February 15, 2017 to be held at Kent County Administrative Complex, Conference Room 220, 555 Bay Road, Dover, DE at 9:00am.